



ELSEVIER

Chemical Physics 192 (1995) 393-396

**Chemical
Physics**

Author index to volume 192

Abboud, J.-L.M., see J. Mestres 192 (1995) 99

Akselrod, L., H.J. Byrne, S. Donovan and S. Roth, A Raman analysis of C_{60} at low temperatures: a study of molecular and crystal-field effects 192 (1995) 307

Ammer, F., A. Penzkofer and P. Weidner, Concentration-dependent fluorescence behaviour of oxazine 750 and rhodamine 6G in porous silicate xerogel monoliths 192 (1995) 325

Ballard, C.C., see M.H. Palmer 192 (1995) 111

Ballesteros, E., see J. Mestres 192 (1995) 99

Baltzer, P., see D.M.P. Holland 192 (1995) 333

Bancroft, G.M., see Z.F. Liu 192 (1995) 255

Bernhard, C., see E. Roduner 192 (1995) 231

Bertrán, J., see J. Mestres 192 (1995) 99

Binninger, U., see E. Roduner 192 (1995) 231

Bolvin, H. and O. Kahn, Ising model for low-spin high-spin transitions in molecular compounds; within and beyond the mean-field approximation 192 (1995) 295

Byrne, H.J., see L. Akselrod 192 (1995) 307

Chandra, A.K., see V. Sreedhara Rao 192 (1995) 247

Coletta, F., A. Ferrarini, F. Gottardi and P.L. Nordio, NMR relaxation in long-chain quaternary ammonium ions: the role of torsional flexibility 192 (1995) 19

Daverkausen, J., see M.S. Gudipati 192 (1995) 37

De Benedictis, S. and G. Dilecce, Vibrational relaxation of $N_2(C, v)$ state in N_2 pulsed rf discharge: electron impact and pooling reactions 192 (1995) 149

Dellis, D. and J. Samios, Dynamical properties of carbonyl sulphide diluted in argon at different densities. A molecular dynamics investigation 192 (1995) 281

Dilecce, G., see S. De Benedictis 192 (1995) 149

Donovan, S., see L. Akselrod 192 (1995) 307

Duran, M., see J. Mestres 192 (1995) 99

Ferrarini, A., see F. Coletta 192 (1995) 19

Fink, K., see C. Wang 192 (1995) 25

Fisz, J.J., An algorithm for analyzing the polarization-free picosecond fluorescence experiments on TICT, CT, PT and other relevant systems in solutions 192 (1995) 163

Freitag, A., Ch. van Wüllen and V. Staemmler, An ab initio study of the chemical bond and the ^{129}Xe NMR chemical shifts in M^+-Xe compounds, $M=Li, Na, K, Cu, Ag$ 192 (1995) 267

Fujii, T., see H. Kishi 192 (1995) 387

Gottardi, F., see F. Coletta	192 (1995) 19
Grabowska, J. and K. Sienicki, Energy transfer between finite-sized interacting molecules in a one-dimensional system	192 (1995) 89
Greene-Johnson, W., CPA theory with correlative effects: application to the $\nu_s(\text{PF}_3)$ stretch of $\text{PF}_3/\text{Pt}(111)$	192 (1995) 9
Gudipati, M.S., M. Maus, J. Daverkausen and G. Hohlneicher, Higher excited states of aromatic hydrocarbons. III. Assigning the in-plane polarized transitions of low-symmetry molecules: chrysene and E-stilbene	192 (1995) 37
Guest, M.F., see M.H. Palmer	192 (1995) 111
Herreros, M., see J. Mestres	192 (1995) 99
Hofer, A., see E. Roduner	192 (1995) 231
Hohlneicher, G., see M.S. Gudipati	192 (1995) 37
Holland, D.M.P., M.A. MacDonald, P. Baltzer, L. Karlsson, M. Lundqvist, B. Wannberg and W. von Niessen, An experimental and theoretical study of the valence shell photo-electron spectrum of sulphur hexafluoride	192 (1995) 333
Hoxha, A., see B. Leyh	192 (1995) 65
Jug, K., see M. Krack	192 (1995) 127
Kahn, O., see H. Bolvin	192 (1995) 295
Karlsson, L., see D.M.P. Holland	192 (1995) 333
Kishi, H. and T. Fujii, Low-work-function surfaces with φ as low as 2.0 eV produced by alkaline earth element carbonate decomposition	192 (1995) 387
Krack, M. and K. Jug, Reactivity of silicon clusters	192 (1995) 127
Kreitzman, S.R. and E. Roduner, Theory of avoided level-crossing relaxation dynamics for axial muonated radicals	192 (1995) 189
Leyh, B. and A. Hoxha, Reaction window in the single-electron capture by ammonia dication	192 (1995) 65
Lipp, M.J. and J.J. O'Brien, Temperature and population measurements of $n=2$ hydrogen atoms in H_2 RF discharges from H_α (Balmer) spectral profiles obtained by intracavity laser spectroscopy	192 (1995) 355
Liu, Z.F., G.M. Bancroft, J.S. Tse and Z.Z. Yang, Multiple-scattering-X α studies of the $\text{L}_{2,3}$ near edge photoabsorption spectra of H_2S , HCl and Cl_2 , and on the intensity variation in the $\text{L}_{2,3}$ near edge spectra of XH_n , $\text{X}=\text{Si, P, S, Cl}$ and $n=4, 3, 2, 1$	192 (1995) 255
Lukin, L.V., Electron localization in laser ionization of liquid water	192 (1995) 135
Lundqvist, M., see D.M.P. Holland	192 (1995) 333
MacDonald, M.A., see D.M.P. Holland	192 (1995) 333
Macrae, R.M., see E. Roduner	192 (1995) 231
Martin, M.M., P. Plaza and Y.H. Meyer, Ultrafast intramolecular charge transfer in the merocyanine dye DCM	192 (1995) 367
Maus, M., see M.S. Gudipati	192 (1995) 37
Mestres, J., M. Duran, J. Bertrán, E. Ballesteros, M. Herreros and J.-L.M. Abboud, Is there a hydride transfer between N_2OH^+ and saturated hydrocarbons?	192 (1995) 99
Meyer, Y.H., see M.M. Martin	192 (1995) 367

Niedermayer, C., see E. Roduner	192 (1995) 231
Niedzielski, J., see J. Turulski	192 (1995) 319
Nordio, P.L., see F. Coletta	192 (1995) 19
O'Brien, J.J., see M.J. Lipp	192 (1995) 355
Ottinger, Ch., A.F. Vilessov and D.D. Xu, High-resolution study of the luminescent electronic energy transfer reaction of $\text{Xe}({}^3\text{P}_{0,2})$ with ${}^{14}\text{N}_2$ and ${}^{15}\text{N}_2$	192 (1995) 49
Palmer, M.H., I.C. Walker, C.C. Ballard and M.F. Guest, The electronic states of furan studied by VUV absorption, near-threshold electron energy-loss spectroscopy and ab initio multi-reference configuration interaction calculations	192 (1995) 111
Penzkofer, A., see F. Ammer	192 (1995) 325
Pezler, B., see J. Turulski	192 (1995) 319
Plaza, P., see M.M. Martin	192 (1995) 367
Prassides, K., see E. Roduner	192 (1995) 231
Reid, I.D., see E. Roduner	192 (1995) 231
Roduner, E., see S.R. Kreitzman	192 (1995) 189
Roduner, E., K. Prassides, R.M. Macrae, I.M. Thomas, C. Niedermayer, U. Binniger, C. Bernhard, A. Hofer and I.D. Reid, Reorientational dynamics of C_{60} in the solid state. An avoided level-crossing muon spin resonance study	192 (1995) 231
Roth, S., see L. Akselrod	192 (1995) 307
Samios, J., see D. Dellis	192 (1995) 281
Sienicki, K., see J. Grabowska	192 (1995) 89
Smirnov, Yu.M., Dissociative excitation of K and K^+ emission by electron impact on KI molecules	192 (1995) 379
Sreedhara Rao, V. and A.K. Chandra, Reactions of cyanogen radical with alkanes and an explanation for negative temperature dependence of rate constants	192 (1995) 247
Staemmler, V., see C. Wang	192 (1995) 25
Staemmler, V., see A. Freitag	192 (1995) 267
Sultan, R.F., The stability of propagating chemical spike structures and the transition to traveling pulses	192 (1995) 239
Thomas, I.M., see E. Roduner	192 (1995) 231
Traytak, S.D., Diffusion-controlled reaction rate to an active site	192 (1995) 1
Tse, J.S., see Z.F. Liu	192 (1995) 255
Turulski, J., J. Niedzielski and B. Pezler, The capture rate of an ion by a symmetrical top quadrupole	192 (1995) 319
Van Wüllen, Ch., see A. Freitag	192 (1995) 267
Vilessov, A.F., see Ch. Ottinger	192 (1995) 49
Vitali, D., Proton tunneling in symmetric H-bond. A simple microscopic model	192 (1995) 79
Von Niessen, W., see D.M.P. Holland	192 (1995) 333
Walker, I.C., see M.H. Palmer	192 (1995) 111
Wang, C., K. Fink and V. Staemmler, A quantum chemical ab initio study of the superexchange coupling in binuclear oxygen-bridged Ni(II) complexes	192 (1995) 25

Wannberg, B., see D.M.P. Holland 192 (1995) 333
Weidner, P., see F. Ammer 192 (1995) 325

Xu, D.D., see Ch. Ottinger 192 (1995) 49

Yang, Z.Z., see Z.F. Liu 192 (1995) 255



ELSEVIER

Chemical Physics 192 (1995) 397-405

**Chemical
Physics**

Subject index to volume 192

Methods

Theoretical

Classical mechanics

Diffusion-controlled reaction rate to an active site, S.D. Traytak 192 (1995) 1

Many body and quasiparticle approaches

Proton tunneling in symmetric H-bond. A simple microscopic model, D. Vitali 192 (1995) 79

Transport quantum mechanics

Theory of avoided level-crossing relaxation dynamics for axial muonated radicals, S.R. Kreitzman and E. Roduner 192 (1995) 189

Equilibrium statistical mechanics

CPA theory with correlative effects: application to the $\nu_s(\text{PF}_3)$ stretch of $\text{PF}_3/\text{Pt}(111)$, W. Greene-Johnson 192 (1995) 9

Energy transfer between finite-sized interacting molecules in a one-dimensional system, J. Grabowska and K. Sienicki 192 (1995) 89

Non-equilibrium thermodynamic and hydrodynamic theories

NMR relaxation in long-chain quaternary ammonium ions: the role of torsional flexibility, F. Coletta, A. Ferrarini, F. Gottardi and P.L. Nordio 192 (1995) 19

The stability of propagating chemical spike structures and the transition to traveling pulses, R.F. Sultan 192 (1995) 239

Ab initio schemes for stationary properties

A quantum chemical ab initio study of the superexchange coupling in binuclear oxygen-bridged Ni(II) complexes, C. Wang, K. Fink and V. Staemmler 192 (1995) 25

Is there a hydride transfer between N_2OH^+ and saturated hydrocarbons?, J. Mestres, M. Duran, J. Bertrán, E. Ballesteros, M. Herreros and J.-L.M. Abboud 192 (1995) 99

The electronic states of furan studied by VUV absorption, near-threshold electron energy-loss spectroscopy and ab initio multi-reference configuration interaction calculations, M.H. Palmer, I.C. Walker, C.C. Ballard and M.F. Guest 192 (1995) 111

Reactivity of silicon clusters, M. Krack and K. Jug 192 (1995) 127

Reactions of cyanogen radical with alkanes and an explanation for negative temperature dependence of rate constants, V. Sreedhara Rao and A.K. Chandra 192 (1995) 247

Multiple-scattering-X α studies of the L _{2,3} near edge photoabsorption spectra of H ₂ S, HCl and Cl ₂ , and on the intensity variation in the L _{2,3} near edge spectra of XH _n , X=Si, P, S, Cl and n=4, 3, 2, 1, Z.F. Liu, G.M. Bancroft, J.S. Tse and Z.Z. Yang	192 (1995) 255
An ab initio study of the chemical bond and the ¹²⁹ Xe NMR chemical shifts in M ⁺ -Xe compounds, M=Li, Na, K, Cu, Ag, A. Freitag, Ch. van Wüllen and V. Staemmler	192 (1995) 267
<i>Computational and simulation methods</i>	
Higher excited states of aromatic hydrocarbons. III. Assigning the in-plane polarized transitions of low-symmetry molecules: chrysene and E-stilbene, M.S. Gudipati, M. Maus, J. Daverkausen and G. Hohlneicher	192 (1995) 37
Reactions of cyanogen radical with alkanes and an explanation for negative temperature dependence of rate constants, V. Sreedhara Rao and A.K. Chandra	192 (1995) 247
Dynamical properties of carbonyl sulphide diluted in argon at different densities. A molecular dynamics investigation, D. Dellis and J. Samios	192 (1995) 281
Ising model for low-spin high-spin transitions in molecular compounds; within and beyond the mean-field approximation, H. Bolvin and O. Kahn	192 (1995) 295
<i>Molecular dynamics and scattering theory</i>	
A Raman analysis of C ₆₀ at low temperatures: a study of molecular and crystal-field effects, L. Akselrod, H.J. Byrne, S. Donovan and S. Roth	192 (1995) 307
The capture rate of an- α -ion by a symmetrical top quadrupole, J. Turulski, J. Niedzielski and B. Pezler	192 (1995) 319
<i>Experimental</i>	
<i>Magnetic resonances</i>	
NMR relaxation in long-chain quaternary ammonium ions: the role of torsional flexibility, F. Coletta, A. Ferrarini, F. Gottardi and P.L. Nordio	192 (1995) 19
Theory of avoided level-crossing relaxation dynamics for axial muonated radicals, S.R. Kreitzman and E. Roduner	192 (1995) 189
Reorientational dynamics of C ₆₀ in the solid state. An avoided level-crossing muon spin resonance study, E. Roduner, K. Prassides, R.M. Macrae, I.M. Thomas, C. Niedermayer, U. Binninger, C. Bernhard, A. Hofer and I.D. Reid	192 (1995) 231
<i>Cyclotron resonances</i>	
Is there a hydride transfer between N ₂ OH ⁺ and saturated hydrocarbons?, J. Mestres, M. Duran, J. Bertrán, E. Ballesteros, M. Herreros and J.-L.M. Abboud	192 (1995) 99
<i>Infrared spectroscopy</i>	
CPA theory with correlative effects: application to the ν_s (PF ₃) stretch of PF ₃ /Pt(111), W. Greene-Johnson	192 (1995) 9
<i>Visible and UV spectroscopy</i>	
Higher excited states of aromatic hydrocarbons. III. Assigning the in-plane polarized transitions of low-symmetry molecules: chrysene and E-stilbene, M.S. Gudipati, M. Maus, J. Daverkausen and G. Hohlneicher	192 (1995) 37
High-resolution study of the luminescent electronic energy transfer reaction of Xe(³ P _{0,2}) with ¹⁴ N ₂ and ¹⁵ N ₂ , Ch. Ottinger, A.F. Vilesov and D.D. Xu	192 (1995) 49

The electronic states of furan studied by VUV absorption, near-threshold electron energy-loss spectroscopy and ab initio multi-reference configuration interaction calculations, M.H. Palmer, I.C. Walker, C.C. Ballard and M.F. Guest	192 (1995) 111
Electron localization in laser ionization of liquid water, L.V. Lukin	192 (1995) 135
Vibrational relaxation of $N_2(C, v)$ state in N_2 pulsed rf discharge: electron impact and pooling reactions, S. De Benedictis and G. Dilecce	192 (1995) 149
<i>Fluorescence spectroscopy</i>	
Energy transfer between finite-sized interacting molecules in a one-dimensional system, J. Grabowska and K. Sienicki	192 (1995) 89
An algorithm for analyzing the polarization-free picosecond fluorescence experiments on TICT, CT, PT and other relevant systems in solutions, J.J. Fisz	192 (1995) 163
Concentration-dependent fluorescence behaviour of oxazine 750 and rhodamine 6G in porous silicate xerogel monoliths, F. Ammer, A. Penzkofer and P. Weidner	192 (1995) 325
<i>Photoelectron and Auger spectroscopy</i>	
Multiple-scattering-X α studies of the $L_{2,3}$ near edge photoabsorption spectra of H_2S , HCl and Cl_2 , and on the intensity variation in the $L_{2,3}$ near edge spectra of XH_n , $X=Si, P, S, Cl$ and $n=4, 3, 2, 1$, Z.F. Liu, G.M. Bancroft, J.S. Tse and Z.Z. Yang	192 (1995) 255
An experimental and theoretical study of the valence shell photoelectron spectrum of sulphur hexafluoride, D.M.P. Holland, M.A. MacDonald, P. Baltzer, L. Karlsson, M. Lundqvist, B. Wannberg and W. von Niessen	192 (1995) 333
<i>Laser methods</i>	
Temperature and population measurements of $n=2$ hydrogen atoms in H_2 RF discharges from H_α (Balmer) spectral profiles obtained by intracavity laser spectroscopy, M.J. Lipp and J.J. O'Brien	192 (1995) 355
<i>Picosecond spectroscopy</i>	
An algorithm for analyzing the polarization-free picosecond fluorescence experiments on TICT, CT, PT and other relevant systems in solutions, J.J. Fisz	192 (1995) 163
Ultrafast intramolecular charge transfer in the merocyanine dye DCM, M.M. Martin, P. Plaza and Y.H. Meyer	192 (1995) 367
<i>Synchrotron spectroscopies</i>	
Higher excited states of aromatic hydrocarbons. III. Assigning the in-plane polarized transitions of low-symmetry molecules: chrysene and E-stilbene, M.S. Gudipati, M. Maus, J. Daverkosen and G. Hohlneicher	192 (1995) 37
The electronic states of furan studied by VUV absorption, near-threshold electron energy-loss spectroscopy and ab initio multi-reference configuration interaction calculations, M.H. Palmer, I.C. Walker, C.C. Ballard and M.F. Guest	192 (1995) 111
An experimental and theoretical study of the valence shell photoelectron spectrum of sulphur hexafluoride, D.M.P. Holland, M.A. MacDonald, P. Baltzer, L. Karlsson, M. Lundqvist, B. Wannberg and W. von Niessen	192 (1995) 333
<i>Atomic and molecular beam techniques</i>	
High-resolution study of the luminescent electronic energy transfer reaction of $Xe(^3P_{0,2})$ with $^{14}N_2$ and $^{15}N_2$, Ch. Ottinger, A.F. Vilesov and D.D. Xu	192 (1995) 49

Dissociative excitation of K and K⁺ emission by electron impact on KI molecules,
Yu.M. Smirnov

192 (1995) 379

Time-resolved experiments

Electron localization in laser ionization of liquid water, L.V. Lukin

192 (1995) 135

Vibrational relaxation of N₂(C, ν) state in N₂ pulsed rf discharge: electron impact and
pooling reactions, S. De Benedictis and G. Dilecce

192 (1995) 149

Ultrafast intramolecular charge transfer in the merocyanine dye DCM, M.M. Martin,
P. Plaza and Y.H. Meyer

192 (1995) 367

Mass spectrometry

Reaction window in the single-electron capture by ammonia dications, B. Leyh and A. Hoxha
Is there a hydride transfer between N₂OH⁺ and saturated hydrocarbons?, J. Mestres,

M. Duran, J. Bertrán, E. Ballesteros, M. Herreros and J.-L.M. Abboud

192 (1995) 65

Low-work-function surfaces with φ as low as 2.0 eV produced by alkaline earth element
carbonate decomposition, H. Kishi and T. Fujii

192 (1995) 99

192 (1995) 387

Objects

Bulk systems

Gases

Reaction window in the single-electron capture by ammonia dications, B. Leyh and A. Hoxha
Dynamical properties of carbonyl sulphide diluted in argon at different densities. A molecular

dynamics investigation, D. Dellis and J. Samios

192 (1995) 65

Temperature and population measurements of $n=2$ hydrogen atoms in H₂ RF discharges
from H _{α} (Balmer) spectral profiles obtained by intracavity laser spectroscopy, M.J. Lipp
and J.J. O'Brien

192 (1995) 281

192 (1995) 355

Liquids neat

Electron localization in laser ionization of liquid water, L.V. Lukin

192 (1995) 135

Liquids mixtures and solutions

Energy transfer between finite-sized interacting molecules in a one-dimensional system,
J. Grabowska and K. Sienicki

192 (1995) 89

Ultrafast intramolecular charge transfer in the merocyanine dye DCM, M.M. Martin,
P. Plaza and Y.H. Meyer

192 (1995) 367

Crystals

A Raman analysis of C₆₀ at low temperatures: a study of molecular and crystal-field effects,
L. Akselrod, H.J. Byrne, S. Donovan and S. Roth

192 (1995) 307

-neat

Reorientational dynamics of C₆₀ in the solid state. An avoided level-crossing muon spin
resonance study, E. Roduner, K. Prassides, R.M. Macrae, I.M. Thomas, C. Niedermayer,
U. Binninger, C. Bernhard, A. Hofer and I.D. Reid

192 (1995) 231

Thin films

A Raman analysis of C₆₀ at low temperatures: a study of molecular and crystal-field effects,
L. Akselrod, H.J. Byrne, S. Donovan and S. Roth

192 (1995) 307

Surfaces

CPA theory with correlative effects: application to the $\nu_s(\text{PF}_3)$ stretch of PF₃/Pt(111),
W. Greene-Johnson

192 (1995) 9

Low-dimensional materials

Energy transfer between finite-sized interacting molecules in a one-dimensional system,
J. Grabowska and K. Sienicki

192 (1995) 89

Plasmas

Vibrational relaxation of N₂(C, ν) state in N₂ pulsed rf discharge: electron impact and
pooling reactions, S. De Benedictis and G. Dilecce

192 (1995) 149

Biological systems

Diffusion-controlled reaction rate to an active site, S.D. Traytak

192 (1995) 1

*Microscopic systems**Atoms*

Temperature and population measurements of $n=2$ hydrogen atoms in H₂ RF discharges
from H _{α} (Balmer) spectral profiles obtained by intracavity laser spectroscopy, M.J. Lipp
and J.J. O'Brien

192 (1995) 355

Molecules (neutral and ionic)

Diffusion-controlled reaction rate to an active site, S.D. Traytak

192 (1995) 1

NMR relaxation in long-chain quaternary ammonium ions: the role of torsional flexibility,
F. Coletta, A. Ferrarini, F. Gottardi and P.L. Nordio

192 (1995) 19

Vibrational relaxation of N₂(C, ν) state in N₂ pulsed rf discharge: electron impact and
pooling reactions, S. De Benedictis and G. Dilecce

192 (1995) 149

Ising model for low-spin high-spin transitions in molecular compounds; within and beyond
the mean-field approximation, H. Bolvin and O. Kahn

192 (1995) 295

-diatomic

High-resolution study of the luminescent electronic energy transfer reaction of Xe(³P_{0,2})
with ¹⁴N₂ and ¹⁵N₂, Ch. Ottinger, A.F. Vilesov and D.D. Xu

192 (1995) 49

Dissociative excitation of K and K⁺ emission by electron impact on KI molecules,
Yu.M. Smirnov

192 (1995) 379

-small polyatomics

A quantum chemical ab initio study of the superexchange coupling in binuclear oxygen-
bridged Ni(II) complexes, C. Wang, K. Fink and V. Staemmler

192 (1995) 25

Reaction window in the single-electron capture by ammonia dications, B. Leyh and A. Hoxha
Is there a hydride transfer between N₂OH⁺ and saturated hydrocarbons?, J. Mestres,
M. Duran, J. Bertrán, E. Ballesteros, M. Herreros and J.-L.M. Abboud

192 (1995) 65

192 (1995) 99

Multiple-scattering-X α studies of the L_{2,3} near edge photoabsorption spectra of H₂S, HCl and Cl₂, and on the intensity variation in the L_{2,3} near edge spectra of XH_n, X=Si, P, S, Cl and n=4, 3, 2, 1, Z.F. Liu, G.M. Bancroft, J.S. Tse and Z.Z. Yang 192 (1995) 255

Dynamical properties of carbonyl sulphide diluted in argon at different densities. A molecular dynamics investigation, D. Dellis and J. Samios 192 (1995) 281

The capture rate of an ion by a symmetrical top quadrupole, J. Turulski, J. Niedzielski and B. Pezler 192 (1995) 319

An experimental and theoretical study of the valence shell photoelectron spectrum of sulphur hexafluoride, D.M.P. Holland, M.A. MacDonald, P. Baltzer, L. Karlsson, M. Lundqvist, B. Wannberg and W. von Niessen 192 (1995) 333

-aromatics

Higher excited states of aromatic hydrocarbons. III. Assigning the in-plane polarized transitions of low-symmetry molecules: chrysene and E-stilbene, M.S. Gudipati, M. Maus, J. Daverkausen and G. Hohlneicher 192 (1995) 37

The electronic states of furan studied by VUV absorption, near-threshold electron energy-loss spectroscopy and ab initio multi-reference configuration interaction calculations, M.H. Palmer, I.C. Walker, C.C. Ballard and M.F. Guest 192 (1995) 111

Concentration-dependent fluorescence behaviour of oxazine 750 and rhodamine 6G in porous silicate xerogel monoliths, F. Ammer, A. Penzkofer and P. Weidner 192 (1995) 325

-other large

A Raman analysis of C₆₀ at low temperatures: a study of molecular and crystal-field effects, L. Akselrod, H.J. Byrne, S. Donovan and S. Roth 192 (1995) 307

Molecular aggregates

-dimers

Proton tunneling in symmetric H-bond. A simple microscopic model, D. Vitali 192 (1995) 79

An ab initio study of the chemical bond and the ¹²⁹Xe NMR chemical shifts in M⁺-Xe compounds, M=Li, Na, K, Cu, Ag, A. Freitag, Ch. van Wüllen and V. Staemmler 192 (1995) 267

-clusters

Reactivity of silicon clusters, M. Krack and K. Jug 192 (1995) 127

Free radicals (including hydronium and muonium)

Theory of avoided level-crossing relaxation dynamics for axial muonated radicals, S.R. Kreitzman and E. Roduner 192 (1995) 189

Reorientational dynamics of C₆₀ in the solid state. An avoided level-crossing muon spin resonance study, E. Roduner, K. Prassides, R.M. Macrae, I.M. Thomas, C. Niedermayer, U. Binninger, C. Bernhard, A. Hofer and I.D. Reid 192 (1995) 231

Reactions of cyanogen radical with alkanes and an explanation for negative temperature dependence of rate constants, V. Sreedhara Rao and A.K. Chandra 192 (1995) 247

Ions and charge carriers

The capture rate of an ion by a symmetrical top quadrupole, J. Turulski, J. Niedzielski and B. Pezler 192 (1995) 319

Low-work-function surfaces with ϕ as low as 2.0 eV produced by alkaline earth element carbonate decomposition, H. Kishi and T. Fujii 192 (1995) 387

Phenomena

Molecular structure

The electronic states of furan studied by VUV absorption, near-threshold electron energy-loss spectroscopy and ab initio multi-reference configuration interaction calculations, M.H. Palmer, I.C. Walker, C.C. Ballard and M.F. Guest 192 (1995) 111

An ab initio study of the chemical bond and the ^{129}Xe NMR chemical shifts in $\text{M}^+ \text{-Xe}$ compounds, M=Li, Na, K, Cu, Ag, A. Freitag, Ch. van Wüllen and V. Staemmler 192 (1995) 267

Vibrations and rotations of molecules

A Raman analysis of C_{60} at low temperatures: a study of molecular and crystal-field effects, L. Akselrod, H.J. Byrne, S. Donovan and S. Roth 192 (1995) 307

Electronic structure and states

A quantum chemical ab initio study of the superexchange coupling in binuclear oxygen-bridged Ni(II) complexes, C. Wang, K. Fink and V. Staemmler 192 (1995) 25

Higher excited states of aromatic hydrocarbons. III. Assigning the in-plane polarized transitions of low-symmetry molecules: chrysene and E-stilbene, M.S. Gudipati, M. Maus, J. Däverausen and G. Hohneicher 192 (1995) 37

An experimental and theoretical study of the valence shell photoelectron spectrum of sulphur hexafluoride, D.M.P. Holland, M.A. MacDonald, P. Baltzer, L. Karlsson, M. Lundqvist, B. Wannberg and W. von Niessen 192 (1995) 333

Electric and magnetic properties

An ab initio study of the chemical bond and the ^{129}Xe NMR chemical shifts in $\text{M}^+ \text{-Xe}$ compounds, M=Li, Na, K, Cu, Ag, A. Freitag, Ch. van Wüllen and V. Staemmler 192 (1995) 267

Ising model for low-spin high-spin transitions in molecular compounds; within and beyond the mean-field approximation, H. Bolvin and O. Kahn 192 (1995) 295

Spin splittings

A quantum chemical ab initio study of the superexchange coupling in binuclear oxygen-bridged Ni(II) complexes, C. Wang, K. Fink and V. Staemmler 192 (1995) 25

Molecular interactions

Ising model for low-spin high-spin transitions in molecular compounds; within and beyond the mean-field approximation, H. Bolvin and O. Kahn 192 (1995) 295

Energy transfer processes

High-resolution study of the luminescent electronic energy transfer reaction of $\text{Xe}({}^3\text{P}_{0,2})$ with $^{14}\text{N}_2$ and $^{15}\text{N}_2$, Ch. Ottinger, A.F. Vilesov and D.D. Xu 192 (1995) 49

Energy transfer between finite-sized interacting molecules in a one-dimensional system, J. Grabowska and K. Sienicki 192 (1995) 89

Vibrational relaxation of $N_2(C, v)$ state in N_2 pulsed rf discharge: electron impact and pooling reactions, S. De Benedictis and G. Dilecce	192 (1995) 149
Concentration-dependent fluorescence behaviour of oxazine 750 and rhodamine 6G in porous silicate xerogel monoliths, F. Ammer, A. Penzkofer and P. Weidner	192 (1995) 325
<i>Molecular photophysical processes</i>	
An algorithm for analyzing the polarization-free picosecond fluorescence experiments on TICT, CT, PT and other relevant systems in solutions, J.J. Fisz	192 (1995) 163
Ultrafast intramolecular charge transfer in the merocyanine dye DCM, M.M. Martin, P. Plaza and Y.H. Meyer	192 (1995) 367
<i>Intramolecular dynamics</i>	
NMR relaxation in long-chain quaternary ammonium ions: the role of torsional flexibility, F. Coletta, A. Ferrarini, F. Gottardi and P.L. Nordio	192 (1995) 19
<i>Luminescence spectra, yields and lifetimes</i>	
An algorithm for analyzing the polarization-free picosecond fluorescence experiments on TICT, CT, PT and other relevant systems in solutions, J.J. Fisz	192 (1995) 163
Concentration-dependent fluorescence behaviour of oxazine 750 and rhodamine 6G in porous silicate xerogel monoliths, F. Ammer, A. Penzkofer and P. Weidner	192 (1995) 325
<i>Coherence loss processes</i>	
Proton tunneling in symmetric H-bond. A simple microscopic model, D. Vitali	192 (1995) 79
<i>Non-linear responses (including optical)</i>	
The stability of propagating chemical spike structures and the transition to traveling pulses, R.F. Sultan	192 (1995) 239
<i>Reactions (including dissociation)</i>	
Reactions of cyanogen radical with alkanes and an explanation for negative temperature dependence of rate constants, V. Sreedhara Rao and A.K. Chandra	192 (1995) 247
<i>-gas phase</i>	
Reaction window in the single-electron capture by ammonia dications, B. Leyh and A. Hoxha	192 (1995) 65
Is there a hydride transfer between N_2OH^+ and saturated hydrocarbons?, J. Mestres, M. Duran, J. Bertrán, E. Ballesteros, M. Herreros and J.-L.M. Abboud	192 (1995) 99
The capture rate of an ion by a symmetrical top quadrupole, J. Turulski, J. Niedzielski and B. Pezler	192 (1995) 319
Dissociative excitation of K and K^+ emission by electron impact on KI molecules, Yu.M. Smirnov	192 (1995) 379
<i>-condensed phase</i>	
Diffusion-controlled reaction rate to an active site, S.D. Traytak	192 (1995) 1
<i>-photochemical</i>	
Electron localization in laser ionization of liquid water, L.V. Lukin	192 (1995) 135
An algorithm for analyzing the polarization-free picosecond fluorescence experiments on TICT, CT, PT and other relevant systems in solutions, J.J. Fisz	192 (1995) 163

Tunneling

Proton tunneling in symmetric H-bond. A simple microscopic model, D. Vitali 192 (1995) 79

Electron transfer

Reaction window in the single-electron capture by ammonia dications, B. Leyh and A. Hoxha 192 (1995) 65
 Proton tunneling in symmetric H-bond. A simple microscopic model, D. Vitali 192 (1995) 79
 Ultrafast intramolecular charge transfer in the merocyanine dye DCM, M.M. Martin, P. Plaza and Y.H. Meyer 192 (1995) 367

Ionization (including Rydberg states)

Electron localization in laser ionization of liquid water, L.V. Lukin 192 (1995) 135
 An experimental and theoretical study of the valence shell photoelectron spectrum of sulphur hexafluoride, D.M.P. Holland, M.A. MacDonald, P. Baltzer, L. Karlsson, M. Lundqvist, B. Wannberg and W. von Niessen 192 (1995) 333
 Low-work-function surfaces with ϕ as low as 2.0 eV produced by alkaline earth element carbonate decomposition, H. Kishi and T. Fujii 192 (1995) 387

Molecular motion (including diffusive)

Diffusion-controlled reaction rate to an active site, S.D. Traytak 192 (1995) 1
 NMR relaxation in long-chain quaternary ammonium ions: the role of torsional flexibility, F. Coletta, A. Ferrarini, F. Gottardi and P.L. Nordio 192 (1995) 19
 Theory of avoided level-crossing relaxation dynamics for axial muonated radicals, S.R. Kreitzman and E. Roduner 192 (1995) 189
 Reorientational dynamics of C_{60} in the solid state. An avoided level-crossing muon spin resonance study, E. Roduner, K. Prassides, R.M. Macrae, I.M. Thomas, C. Niedermayer, U. Binninger, C. Bernhard, A. Hofer and I.D. Reid 192 (1995) 231
 Dynamical properties of carbonyl sulphide diluted in argon at different densities. A molecular dynamics investigation, D. Dellis and J. Samios 192 (1995) 281

Isotopic effects

High-resolution study of the luminescent electronic energy transfer reaction of $Xe(^3P_{0,2})$ with $^{14}N_2$ and $^{15}N_2$, Ch. Ottiger, A.F. Vilesov and D.D. Xu 192 (1995) 49

Surface effects and catalysis

Low-work-function surfaces with ϕ as low as 2.0 eV produced by alkaline earth element carbonate decomposition, H. Kishi and T. Fujii 192 (1995) 387

Critical phenomena

The stability of propagating chemical spike structures and the transition to traveling pulses, R.F. Sultan 192 (1995) 239
 Ising model for low-spin high-spin transitions in molecular compounds; within and beyond the mean-field approximation, H. Bolvin and O. Kahn 192 (1995) 295

Phase transitions

Reorientational dynamics of C_{60} in the solid state. An avoided level-crossing muon spin resonance study, E. Roduner, K. Prassides, R.M. Macrae, I.M. Thomas, C. Niedermayer, U. Binninger, C. Bernhard, A. Hofer and I.D. Reid 192 (1995) 231